REMARKS

This application has been reviewed in light of the Office Action dated June 6, 2003. Claims 1-15 are in this application. Claim 8/1 has been amended to be in independent form, and Claims 8/2 and 8/3 have been presented as newly-added Claims 14 and 15, respectively. Claims 1, 8, 10, and Claim 12 are in independent form. Favorable reconsideration is requested.

Applicants note with appreciation the allowance of Claims 12 and 13 and the indication that Claim 8 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. Since the latter claim has been so rewritten, it, together with new Claims 14 and 15 which depend from Claim 8, is now believed to be in condition for allowance.

Claims 1-7 and 9-11 were rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent 5,396,350 (Beeson et al.) in view of U.S. Patent 6,305,811 (Beeson et al.).

The aspect of the invention to which independent Claim 1 is directed has been discussed adequately in Applicants' previous Amendments, as has the Examiner's primary reference, *Beeson '350,* and it is not believed to be necessary to repeat that discussion in full. The outstanding Office Action, in rejecting Claim 1, concedes that at least two recitations of that claim are not taught by *Beeson '350*: (1) the recited reflector; and (2) the arrangement of the optical element and reflector such that the exit angle is less than 70° (see pages 2 and 3 of the Office Action). The Office Action cites *Beeson '811* for the reflector, and relies in the alternative on that patent or on case law for the exit angle. Applicants have carefully studied the prior art and the Office Action, and based on their study, submit that the Office Action entirely fails even to make our a proper *prima facie* case of obviousness, as required in the MPEP.

A proper *prima facie* case of obviousness requires three things, as stated in the MPEP:

> "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

To begin with, Applicants submit that the Office Action fails to provide any credible motivation for incorporating a reflector into the *Beeson '350* structure in the manner proposed. The Office Action offers, as such motivation, "it is old and well known in the illumination art to provide a reflector to a light source in an illumination system *for the purpose of reflecting and propagating light forward to a desired direction*" (Office Action at page 2; emphasis added). The reflector recited in Claim 1 has the characteristics, according to that claim, of:

> "surrounding the lamp, a side of said reflector facing towards said lamp being reflecting, said reflector being formed with an emission opening for emission of light",

and of

> "being shaped and arranged with reference to said lamp that only light beams reflected at said reflector can exit said emission opening through said optical element".

As Applicants have pointed out in their last Amendment, however, the light from the *Beeson '350* lamps 4 (see various Figs.) already goes where intended and desired. This is achieved by means of the slab waveguide 6, without any apparent need for a reflector. Since the waveguide 6 is already serving "the purpose of reflecting and propagating light forward to a desired direction", to use the Office Action's own language, this alleged motivation is in fact plainly *no motivation at all* to make *any* modification to the structure of *Beeson '350*.

Moreover, even if, for argument's sake, it were assumed that some reason existed for adding a reflector like that in *Beeson '811* to *Beeson '350*, it is frankly not seen how that could be done in such a manner as to achieve the recitation quoted above, that the reflector must have a light emission opening, and that the lamp and reflector must be so arranged that "only light beams reflected at said reflector can exit said emission opening through said optical element". From *Beeson '350*, it is apparent that even if a reflector like that of *Beeson '811* were added surrounding the lamp 4 in *Beeson '350*, at the most, only *some* of the light would reach the optical element after reflection by the reflector. Contrary to what is recited in Claim 1, other light would reach the optical element without first having been reflected, i.e., by passing straight into the slab waveguide 6 and thence to the optical element – exactly as happens in the unmodified device of *Beeson '350*.

For these reasons, it is believed plain that the rejection of Claim 1 is improper, and must be withdrawn.

In addition, however, the rejection fails for other reasons as well. The Office Action also concedes that *Beeson '350* "does not specifically recite the exit angle being 70 degrees", the rejection is based on the statement that "as shown in figures 2, 10 and 12 the exit angle *is being interpreted* as being about 70 degrees" (Office Action, at page 3; emphasis added). Applicants respectfully remind the Examiner that while prior art may be relied on for all that it fairly and fully teaches, a *clear* teaching of the feature for which the reference is relied upon is required for a proper rejection. The phrase "is being interpreted", just quoted, is understood as meaning that the Examiner cannot be certain what the angle in the cited figures of *Beeson '350* is, but chooses, essentially, to assume that it "is about 70 degrees".

Moreover, even if it could properly be admitted that *Beeson '350* shows an exit angle meeting the phrase "about 70 degrees", Applicants respectfully point out, that

that is not what Claim 1 recites. Rather, that claim recites that the exit angle is "*smaller than* a predetermined limit exit angle of about 70°". To meet this recitation, therefore, it would be necessary that *Beeson '350* contain a clear teaching, not of an exit angle of about 70°, but rather an exit angle smaller than that value. The Office Action has not even asserted that such is the case, and on that ground as well, the rejection of Claim 1 is improper.

Moreover, the Office Action's reliance on *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) is misplaced. That case is discussed in the MPEP, in Section 2144.05, as providing an example of a specific set of facts in which the CCPA held that a claim was unpatentable, on the reasoning that (as is also quoted in the Office Action) "[W]here the *general conditions of a claim* are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation" (emphasis added). Notably, the Office Action fails altogether to discuss the rather vague term "general conditions". The MPEP notes that in *Aller*, the CCPA was considering a claimed process that was performed at a temperature between 40° C and 80° C, and at an acid concentration between 25% and 70%, and held that process obvious over a reference that disclosed a process differing form the claim only in disclosing a temperature of 100° C and an acid concentration of 10%. The same page of the MPEP, however, makes clear that this reasoning can only be applied where the parameter in question has been recognized as being a result-effective one, that is, as being one which achieves the result being sought. This essential point is not even addressed in the Office Action, which is completely silent as to any ostensible basis for asserting that the prior taught that controlling the exit angle was at all useful in achieving the result sought by Applicants.

For this reason also, entirely independently of those presented above, it is respectfully asserted that the Office Action fails even to make out a *prima facie* case of obviousness, and that the rejection of Claim 1 is improper and must be withdrawn.

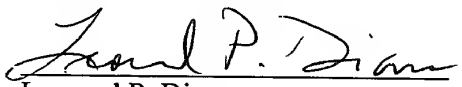
Independent Claim 10 includes a similar feature of a reflector surrounding the lamp, where a side of the reflector faces towards the lamp being reflecting, and the reflector is formed with an emission opening for emission of light, and the reflector is shaped and arranged with reference to the lamp so that only light beams reflected at the reflector can exit the emission opening through the optical element, as discussed above in connection with Claim 1. Accordingly, Claim 10 is believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

The other rejected claims in this application depend from independent Claim 1, and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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